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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JABR, FADEY S

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,766

Applicant(s)

HWANG, TEN-LEE

Examiner

Fadey S. Jabr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the limitation "said central server" in line 16. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 11-14, 16, 17, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nhaissi, U.S. Patent No. 6,381,315 B1.

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As per **Claim 11**, Nhaissi discloses a system to at least dynamically assist a customer to use a service operator that offers a lowest communication usage rate, wherein at least a portion of communication service is charged by duration, said system comprising:

- a dialing device for making a dialing process to create a communication with said service operator (Figure 1 (18), Col. 5, line 5);

- a front-end control device, coupled to said dialing device, for transferring one dialing parameter generated by the customer into another dialing parameter corresponding to said service operator, for storing a dialing data, and for regularly exchanging information; (Figure 1 (30), Col. 14, lines 52-60); and

- a central server, coupled to said front-end control device via a communication network connected to a local network for internal communication, said central server having: (Figure 1 (2), Col. 13, Lines 42-44);

- an application program unit, coupled to said local network, for computing the communication-cost by using dialing data in accordance with fixed charge and variable rates of a plurality of service operators for said communication service (Col. 14, lines 52-62); and

- a database unit, coupled to said local network and said application program unit, for providing said application program unit with a plurality of operation tables (Col. 14, lines 38-44).

As per **Claim 12**, Nhaissi further discloses said communication service is the one selected from one group consisting of international call, long distance call, roaming call, point-to-point connection call, wireline, wireless, cable TV, satellite, broadcast, voice, data, broadband, multimedia communication and the combinations (Col. 4, line 66).

As per **Claim 13**, Nhaissi further discloses said dialing device is the one selected from one group consisting of phones, fax machines, computers, private exchange (PBX), mobile phones, data gateways, data switches, personal data assistant (PDA), gaming devices, television, setup boxes, and the combinations (Figure 1 (18), Col. 5, line 5).

As per **Claim 14**, Nhaissi further discloses said front-end control device is at least a software program incorporated into the dialing device (Col. 18, line 33).

As per **Claim 16**, Nhaissi further discloses said central server utilize data warehousing techniques to segment customers and perform database marketing for displaying advertising messages from said customer service unit (Col. 14, line 38).

As per **Claim 17**, Nhaissi further discloses an information management unit coupled to said local network for managing data stream within said central server and said local network (Figure 1 (2), Col. 8, lines 44-5).

As per **Claim 19**, Nhaissi further discloses said operation tables is the one selected from one group consisting of a customer identification, said dialing data, a number-mapping table, said fixed charge, said variable rates, a discount plans, a customer service records, a advertising messages, service operator codes and the combinations (Col. 14, lines 52-60).

As per **Claim 20**, Nhaissi further discloses a system to at least dynamically assist a customer to use a service operator that offers a lowest communication usage rate, where at least a portion of communication service is charged by duration, said system comprising:

- a dialing device for making a dialing process to create a communication with said service operator (Figure 1 (18), Col. 5, line 5);

- a front-end control device, coupled to said dialing device, for transferring one dialing parameter generated by the customer into another dialing parameter corresponding to said service operator, for storing a dialing data, and for regularly exchanging information; (Figure 1 (30), Col. 14, lines 52-60); and

- a central server, coupled to said front-end control device via a wide-area communication network connected to a local network for internal communication, said central server having : (Figure 1 (2), Col. 13, Lines 42-44);

- a customer service unit, coupled to said local network, for maintaining information with respect to the customer and said service operator;

- an information management unit, coupled to said local network, for managing data stream within said central server and said local network;

- an application program unit, coupled to said local network, for computing the communication-cost by using dialing data in accordance with fixed charge and variable rates of a plurality of service operators for said communication service; (Col. 14, lines 52-62) and

- a database unit, coupled to said local network and said application program unit, for providing said application program unit with a customer identification, said dialing data, a number-mapping table, said fixed charge, said variable rates, a discount plans, a customer service records, a advertising messages, service operator codes and the combinations (Col. 14, lines 38-44).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nhaissi, U.S. Patent No. 6,381,315 B1 in view of Pokress, U.S. Patent No. 6,169,791 B1 and Sneeringer, U.S. Patent No. 6,684,076 B2.

As per **Claim 1**, Nhaissi discloses a method to at least dynamically assist a customer to use a service operator that offers a lowest usage rate, where at least a portion of communication service is charged by duration, said method comprising the steps of:

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- inputting customer identification to a customer service unit such that said customer service unit confirms with the customer after said customer identification is exactly received (Col. 14, line 38);

- receiving dialing data of the customer, storing said dialing data in the memory of a front-end control device, and then making a call based on a number-mapping table in said front-end control device (Col. 14, lines 38-62);

- displaying the code name of said service operator to correctly show said service operator providing lowest usage rate when said call is made (Col. 14, lines 23-44);

Although it may have been obvious to one having ordinary skill in the art at the time of applicant's invention, Nhaissi, however fails to explicitly disclose sending said dialing data in said front-end control device regularly to said customer service unit and acquiring said number-mapping table optimized based upon previous said dialing data in accordance with a fixed charge and variable rates of a plurality of service operators for said communication. However, Pokress discloses updating a server that includes customer records and service carrier information and billing records from customer's computer then sending the new data to customer's computer (Col. 14, lines 10-19). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Nhaissi and provide the opportunity for the customer to receive updated service carrier least cost tables as disclosed by Pokress because acquiring updated least cost tables would allow the customer to make calls based on newer service provider billing rates. Additionally, although it may have been obvious to one having ordinary skill in the art at the time of applicant's invention, Nhaissi and Pokress, fail to disclose inquiring customer service records of the customer from a website controlled by said central

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server wherein the customer is authorized by identifying said customer identification for communication security. However, Sneeringer discloses a global network that allows users to request a query of their usage data (Col. 36, lines 65-67, Col. 37, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Nhaissi and provide the ability for the customer to request their usage data as disclosed by Sneeringer. Sneeringer provides motivation by indicating that the user would want to analyze their usage of service carriers telecommunications system (Col. 37, lines 8-10).

As per **Claim 2**, Nhaissi further discloses said communication service is the one selected from one group consisting of international call, long distance call, roaming call, and point-to-point connection call, wireline, wireless, cable TV, satellite, broadcast, voice, data, broadband, multimedia communication and the combinations (Col. 4, line 66).

As per **Claim 3**, Nhaissi further discloses said customer identification is the one selected from one group consisting of the serial number of said front-end control devices, customer identification number, customer name, customer phone number, customer address, historic calls and the combinations (Col. 14, line 39).

As per **Claim 4**, Nhaissi further discloses said dialing data is the one selected from one group consisting of dialed numbers, dialed parameters, calling time, calling duration, calling traffic, and the combinations (Col. 14, lines 46-48).

As per **Claim 5**, Nhaissi further discloses said front-end control device utilizes said dialed numbers, said dialed parameters and said number-mapping table to obtain a plurality of dialed-out parameters corresponding to said service operator offering lowest communication usage rate (Col. 14, lines 52-60).

As per **Claim 6**, Nhaissi further discloses further using said dialing data, said fixed charge and variable rates of all service operators, and a plurality of discount plans of said service operators to map out a plurality of dialed-out parameters to utilize the lowest communication usage rate (Col. 14, lines 52-67, Col. 15, lines 1-3).

As per **Claim 7**, Nhaissi further discloses said fixed charge, variable rates, and said discount plans of said service operators can be retrieved automatically from said service operators (Col. 14, lines 52-60).

As per **Claim 10**, Nhaissi further discloses said customer service records are the one selected one group consisting of said dialing data, dialed-out parameters, saved communication-cost, said fixed charge, said variable rates, discount plans and the combinations (Col. 2, lines 16-19).

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8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nhaissi, U.S. Patent No. 6,381,315 B1 in view of Pokress, U.S. Patent No. 6,169,791 B1 and Sneeringer, U.S. Patent No. 6,684,076 B2 as applied to claim 1 above, and further in view of Byers, U.S. Patent No. 5,570,417.

As per **Claim 8**, Nhaissi fails to disclose the step that the customer is able to change said code name of said service operator determined by said central server into another desired service operator as default setting. Byers discloses that the call should not be routed to a service provider if need be (Col. 8, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Nhaissi to allow customers to choose their service provider if the default is not their primary choice. The motivation would be to provide more flexibility to the customer in choosing which service provider routes their call, in view of the fact that some customers might be more partial to certain service providers than others.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nhaissi, U.S. Patent No. 6,381,315 B1 in view of Pokress, U.S. Patent No. 6,169,791 B1 and Sneeringer, U.S. Patent No. 6,684,076 B2 as applied to claim 1 above, and further in view of Kolling et al., U.S. Patent No. 5,963,925.

As per **Claim 9**, Nhaissi fails to disclose that a website may periodically send said customer service records to e-mail box of the customer to reduce customer query on the website. Kolling et al. discloses that a customer may be able to receive electronic statements from any biller they receive service from (Figure 8 (204), Col. 5, lines 21-24). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Nhaissi to provide the customer with their own billing statements electronically. Kolling et al. provides motivation by indicating the invention enhances the value of the consumer service provider in the eyes of the consumer.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nhaissi, U.S. Patent No. 6,381,315 B1 in view of McKenna et al., U.S. Patent No. 6,684,076 B2.

As per **Claim 15**, Nhaissi fails to disclose a central server that utilizes data warehousing techniques to segment customers and perform database marketing for displaying advertising messages from said customer service unit. McKenna et al. discloses a communication technique in which a service provider is able to transmit information to subscribers (Col. 2, lines 13-20). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Nhaissi to provide the customer with information, whether it be advertisements or service record information because it would make it easier for customers using wireless devices to receive pertinent information as opposed to receiving electronic statements on their computers.

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11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nhaissi, U.S. Patent No. 6,381,315 B1 in view of Byers, U.S. Patent No. 5,570,417.

As per **Claim 18**, Nhaissi fails to disclose a system further using free calling minutes and volume discount plans offered by said service operator to optimize the communication-cost. Byers discloses a system that includes special discounts within the rate information to calling parties (Col. 8, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Nhaissi to provide discounts to customers because providing discounts to customers would maximize call volume and therefore profit for the service providers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadey S. Jabr whose telephone number is (571) 272-1516. The examiner can normally be reached on Mon. - Fri. 7:30am to 4:00pm.

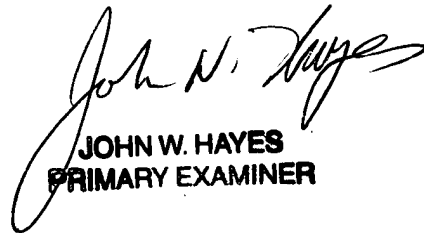
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fadey S Jabr
Examiner
Art Unit 3639

fsj


JOHN W. HAYES
PRIMARY EXAMINER